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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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08/902,331 07/29/97 GRUENENFELDER

P 622/42052DIV

IM62/0418  
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1200 G STREET N W  
WASHINGTON DC 20005-3814

EXAMINER
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CANTELMO, G

ART UNIT	PAPER NUMBER
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1753

DATE MAILED: 04/18/00

*15*

**Please find below and/or attached an Office communication concerning this application or proceeding.**

**Commissioner of Patents and Trademarks**

# Office Action Summary

Application No.  
08/902,331

Applicant(s)  
Gruenenfelder et al.

Examiner  
Gregg Cantelmo

Group Art Unit  
1753



☒ Responsive to communication(s) filed on Feb 10, 2000

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 35 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

## Disposition of Claim

☒ Claim(s) 35-37 and 44 is/are pending in the application

Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration

☐ Claim(s) \_\_\_\_\_ is/are allowed.

☒ Claim(s) 35-37 and 44 is/are rejected.

☐ Claim(s) \_\_\_\_\_ is/are objected to.

☐ Claims \_\_\_\_\_ are subject to restriction or election requirement.

## Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.

☒ The specification is objected to by the Examiner.

☒ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119

☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☒ All ☐ Some\* ☒ None of the CERTIFIED copies of the priority documents have been

☐ received.

☒ received in Application No. (Series Code/Serial Number) 08/417,854

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\*Certified copies not received: \_\_\_\_\_

☒ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

## Attachment(s)

☐ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). \_\_\_\_\_

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

— SEE OFFICE ACTION ON THE FOLLOWING PAGES —

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## **DETAILED ACTION**

### ***Continued Prosecution Application***

1. The request filed on February 14, 2000 for a Continued Prosecution Application (CPA) under 37 CFR 1.53(d) based on parent Application No. 08/902,331 is acceptable and a CPA has been established. An action on the CPA follows.

### ***Response to Amendment***

2. In response to the amendment filled on February 10, 2000 and entered as per the CPA request received February 14, 2000:

a. The 112 first paragraph rejection of claim 37 presented in the previous office action is withdrawn;

b. The 112 first paragraph rejection of claim 44 presented in the previous office action stands;

c. The drawing objection presented in the previous office action is withdrawn

d. The 102(b) rejection of claims 35-36 presented in the office action mailed August 27, 1998 is withdrawn.

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*Oath/Declaration*

3. This application presents a claim for subject matter not originally claimed or embraced in the statement of the invention. The new matter is that which is discussed in detail in both the specification objection and 112 first paragraph rejection. Since this application is a divisional of U.S. patent No. 5,688,381, the disclosures of both applications must be identical else applicant is advised to pursue any continuing applications as a Continuation-in-Part as opposed to a Divisional. In doing so, a supplemental oath would be required. A supplemental oath or declaration is required under 37 CFR 1.67. The new oath or declaration must properly identify the application of which it is to form a part, preferably by application number and filing date in the body of the oath or declaration. See MPEP §§ 602.01 and 602.02.

*Specification*

4. The amendment filed February 10, 2000 and entered as per the CPA request is objected to under 35 U.S.C. 132 because it introduces new matter into the disclosure. 35 U.S.C. 132 states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: the various steps recited in the order indicated in this amendment nor of preferred values or distances employed therein.

In addition, by amending the specification and claims, it would appear that this application is no longer carved out of the parent case from which this application is a division of and hence would not be in accordance with 35 U.S.C. 120 and 121. The application may be more suitably

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filed as a CIP as opposed to it's current filing as a divisional application of U.S. patent No. 5,688,381. In doing so applicant is advised to review MPEP section 201.06(c) directed to the specification and drawings wherein applicant is advised that a new oath/declaration along with a surcharge is required and that the application should be redesignated as a continuation-in part.

Applicant is required to cancel the new matter in the reply to this Office action.

***Claim Rejections - 35 USC § 112***

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. Claims 35-37 and 44 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

In light of newly submitted claim 44, this claim teaches of a relationship between the degree of taper and radius by manipulating numerous equations. The relationship defined as  $0.2 r_1 \leq d_0 \leq 0.54 r_1$ . However there is no support for such a critical limitation. Applicant relies on support and disclosure provided in the amendment and not clearly and sequentially disclosed within the original application in the same manner. At one point applicant recites that a preferred distance  $a$  is  $30\% d_{113}$ . The skilled artisan would not have been led to such a preferred distance

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without the specific teachings of the new matter presented in applicants amendment to the specification.

Since this claimed limitation is a critical feature of the instant invention, the disclosure as recited in the original application is not enabling for the claimed relationship. The examiner has interpreted such a limitation such that by teaching of the same target dimensions, the target will inherently generate the same taper at some point during sputter operation. Furthermore, it would not have been clear to one having ordinary skill in the art to employ a target having an amount of taper defined by the relationship:  $0.2 r_1 \leq d_0 \leq 0.54 r_1$  since the original specification fails to provide any teaching toward deriving such a critical feature.

### ***Response to Arguments***

7. Applicant's arguments filed February 2, 2000 have been fully considered but they are not persuasive. In particular:

Applicant argues that the above amendment to the specification as well as the relationship recited in independent claim 44 do not constitute new matter. The examiner respectfully disagrees. First, in order to arrive at such a relationship applicant required a lengthy amendment to the specification. While such may be considered within the support of the disclosure according to the applicant, such is not the position of the examiner. First the applicant has taken numerous relationships disclosed throughout the specification and arbitrarily selected preferred values such as the preferred 30% d113 to arrive at the particular relationship recited in claim 44 and the

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amendment to the specification incorporating new matter. Furthermore, the equation (3) is not found within the original disclosure and was a point of contention discussed in the previous personal interview. Equation (4) recites "1/07" wherein no such explicit disclosure is found in the original application. Applicant incorporates preferred combination of 8 relationships with preferred distances and parameters to arrive at the relationship  $0.2 r_1 \leq d_0 \leq 0.54 r_1$ . The skilled artisan would not have been led to such a conclusion based on the originally filed disclosure.

In addition, as a divisional application of U.S. patent No. 5, 688,381 such an amendment to both the specification and claims would not be considered proper since the disclosure of the parent 5,688,381 and that of this application would be substantially different in content. Thus the instant application would be more appropriately filed as a CIP and not a divisional as is it's current continuing status.

Applicant is advised and invited if they wish to pursue such disclosure to be incorporated into the application to refile as a CIP as discussed above.

### *Conclusion*

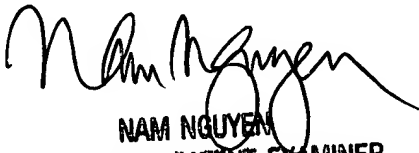
8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gregg Cantelmo whose telephone number is (703) 305-0635. The examiner can normally be reached on Monday through Thursday from 8:30 a.m. to 5:30 p.m.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nam Nguyen, can be reached on (703) 308-3322. The fax phone number for the organization where this application or proceeding is assigned is (703) 305-7718.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

gc

  
NAM NGUYEN  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 1700

April 10, 2000